

## **Appendix No. 1 (Obtaining Your Internet ID)**

The NDBC will store and post the reported current data for MMS on its Internet website. You should contact the NDBC via e-mail at [ndbc.mms.gom@noaa.gov](mailto:ndbc.mms.gom@noaa.gov) and provide the following information for each of your locations. After you have submitted this information, the NDBC will issue an FTP Account ID, a Station ID, and GTS Routing Identifiers and will provide you with a password for access.

### **1. Operator Information**

Operator Name	
Operator URL (Optional, will be hyperlinked from NDBC website to Owner)	
Name of Operator Contact	
Phone Number of Operator Contact	
E-mail address for future NDBC notification of outages and for MMS contact	
IP address of FTP delivery server	

### **2. Unique Station Information**

Station Type (e.g., SPAR, TLP, SEMI, MODU, Mooring)	
Platform/MODU/Project Name	
OCS-G Block and Area (e.g., High Island - HI-334B)	
OCS-G Lease Number	
Latitude (deg min sec)	
Longitude (deg min sec)	
Datum used for Lat/Long	
Water depth (ft)	

### **3. Instrument Information (for *each* unit at your site)**

Instrument ID or Serial Number	
Instrument model (e.g., RDI 75 kHz BB)	
Recovery time (real-time; recovered bi-annually, etc.)	
Transducer depth (meters)	
Coordinate system of data (beam, inst or earth)	
Compass reference (True required)	
Specify if the heading of the transponder is fixed. If fixed, specify if the actual compass value is used for orientation or if it is manually set.	
Vertical Datum Reference – Degrees from vertical looking down (i.e., 0 degrees = downward, 90 degrees = horizontal, 180 degrees = upward)	
Specify if the angle of the transponder is fixed and the tilt value is calculated when installed or if the tilt sensor value is used for orientation.	
Number of bins	
Bin size (meters)	
Specify first bin depth (meters). Bin depth is assumed to represent center of bin. Indicate if otherwise (top or bottom).	
Time data reference (GMT required)	
Number of sampling periods per hour	
Specify sampling period (minutes).	
Specify if clock time represents middle, beginning, or end of period.	
List any obstructions such as risers, moorings, tendons, or umbilicals that may affect the ADCP information.	
Specify any beams that have been taken out of service to accommodate obstructions.	

## **Appendix No. 2 (MMS NDBC File Format)**

The format is based on the RDI broadband ADCP binary format as described in the RDI broadband ADCP Technical Manual. The files must contain for each ensemble: a Header, a Fixed Leader, a Variable Leader, and Velocity Profile data as described in the Technical Manual. The velocity data must be stored in earth coordinates and include echo amplitude, correlation magnitude, and percent good field for all beams.

The MMS GOMR strongly encourages you to store individual ping data in beam coordinates on your local data acquisition computer for at least 180 days from date of retrieval. Individual ping data can be used to verify system integrity and for in depth analysis of current anomalies. In addition, make sure that an MMS/NDBC Leader data block (described below) accompanies each ensemble. In this data block, include ancillary data such as location of measurements, type of instrument, platform name, and operator. Existing RDI software is able to display the data from these files, although it will not display information within the MMS/NDBC Leader Block.

Convert narrowband RDI ADCP data to broadband binary format. For non-ADCP instruments, the owner can use an XML format specified by NDBC or the same binary format described above. In the case of single point instruments, the binary files would only include a single "bin" of data, and many of those fields such as echo amplitude would be blank.

### **MMS/NDBC Leader Data Format**

<b>Binary Byte</b>	<b>Size (bytes)</b>	<b>Field</b>	<b>Description</b>
1-2	2	MMS/NDBC Leader ID	MMS/NDBC Leader identification word (1861h)
3	1	MMS/NDBC version	Version number of the MMS/NDBC Leader data (01h)
4-33	30	Operator (e.g., Universal Oil Corp.)	Name of the ADCP operator (Null-terminated ASCII string)
34-63	30	Platform Name (e.g., Perseus Spar)	Name of the ADCP deployment platform (Null-terminated ASCII string)
64-67	4	Latitude (decimal degrees)	Nominal latitude of observations. Range: -90.0000 to +90.0000 (4-byte IEEE floating point)
68-71	4	Longitude (decimal degrees)	Nominal longitude of observations. Negative longitudes indicate western hemisphere. Range -180.0000 to +180.0000 (4-byte IEEE floating point)
72-75	4	Water depth (meters)	Nominal water depth at observations site (4-byte IEEE floating point)
76-79	4	Transducer depth (meters)	Depth below surface of the ADCP transducer head (4-byte IEEE floating point)
80-99	20	Reserved	User option
100-119	20	ADCP model (e.g., RDI 75 kHz BB)	Model of ADCP (Null-terminated ASCII string)
120-126	7	Transducer Serial No.	Not mandatory
127-131	5	Station Number	NDBC Station Identifier supplied by NDBC
132	1	Bad Beam Indicator	= to show all beams are good; Other number indicates bad or out-of-service beam location
133-134	2	Reserved	User option

Submit the files using the following naming convention:

```
FILE NAME
421010200105120600.bin

Stat#nYYYYMMDDHHmm.bin
|   |   |   |   |   |   |
|   |   |   |   |   |   | ADCP extension
|   |   |   |   |   |   | minute
|   |   |   |   |   |   | hour
|   |   |   |   |   |   | day
|   |   |   |   |   |   | month
|   |   |   |   |   |   | year
|   |   |   |   |   |   | Instrument No. at that site (0, 1, ...)
Site ID assigned by NDBC (5 bytes)
```

NDBC will assign the Station Number after a request by the owner/installer of the ADCP's. Set the instrument number, *n*, to a value of "0" for the near-surface ADCP. If there is more than one ADCP located at the site, number them sequentially. Send the data to the NDBC FTP Internet website, [ndbc1.ndbc.noaa.gov](http://ndbc1.ndbc.noaa.gov). The site is password protected so the user will need to request a password and user ID from NDBC. Each owner will be assigned only one user ID and password, regardless of the number of sites they own.

The date and time contained in the filename should correspond to the start time of the data contained within the binary file, in GMT. All time references within the file should be GMT.

NDBC will retain all original binary files in their historical database.

You can enter latitude and longitude for the site included in the header manually for production platforms, but for MODU's, the data must be derived automatically from a GPS connected to the logging computer/ADCP.

When possible, transfer the data to NDBC at the end of each 20 minutes sampling period, although the NTL only specifies transmission every 12 hours.

### **Delayed Mode Data (Non-Real-Time or ROV Recovered Data)**

Send delayed mode data (non real-time) using the same format and headers as you use for the real-time data. This information will be stored as "historic data." Reformat single point information to the same format as the ADCP data and submit it and store it in the same manner as you store delayed mode data. Alternatively, NDBC will accept the data in their XML format. See *MMS/NDBC Data File Format* section for more details.

### **ROV Monitoring**

Should you acquire data during your ROV operations (whether required or voluntary), you may provide them in the same format and headers as the real-time data. Alternatively, NDBC will accept the data in their XML format. For required ROV monitoring, keep a copy of the data onboard the MODU as long as the drilling rig is working in that field.